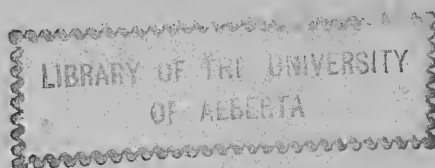


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20 SEP 1954

**CITY OF  
EDMONTON  
ALBERTA**



**HEALTH  
DEPARTMENT  
REPORT  
1922**



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**CITY OF  
EDMONTON  
ALBERTA**



**HEALTH  
DEPARTMENT  
REPORT  
1922**



### MEMBERS OF THE LOCAL BOARD OF HEALTH

Captain J. C. Bowen, (Chairman); Doctor F. S. McPherson;  
J. W. Findlay, Esq.

#### Ex Officio Members

His Worship Mayor Duggan; Doctor T. H. Whitelaw, M.O.H.;  
A. W. Haddow, Esq., City Engineer

### STAFF

Medical Officer of Health .....	T. H. Whitelaw, B.A., M.B.
Chief Health Inspector .....	S. A. Main
Health Inspector .....	R. T. Anderson
Chief Sanitary Inspector .....	W. R. Graham
Sanitary Inspector .....	J. M. Highet, R.P.C., A.I.S.E.
Sanitary Inspector .....	G. Howland
Sanitary Inspector .....	J. H. Blackburn
Sanitary Inspector .....	W. Boyle
Chief Food Inspector .....	L. H. Swail, V.S.
Assistant Food Inspector .....	T. E. Lord
Milk Inspector and Chemist .....	H. C. Graham, B.A.
Dairy Inspector .....	C. Ellinger
Accountant .....	Miss B. B. Murray
Stenographer .....	Miss E. M. Luckwell
Nurse .....	Miss O. B. Bailey

## REVENUE AND EXPENDITURE ACCOUNTS

For the Year Ending December 31st, 1922

### REVENUE

Inspection Fees .....	\$ 542.95
Cemetery, Sale of Graves and Fees .....	3,320.50
Ambulance Fees (November 15th) .....	60.00
	<hr/>
	\$ 3,923.45
Balance Cost of Operation for 1922 .....	31,982.35
	<hr/>
	\$35,905.80

### EXPENDITURE

Salaries .....	\$27,456.45
Printing, Postage and Stationery .....	738.20
Transportation .....	4,223.28
Telephones .....	182.00
Miscellaneous .....	467.54
Uniforms .....	235.57
Disinfection and Quarantine .....	28.40
Cow and Dairy Inspection .....	102.65
Cemetery Expenses .....	1,898.08
Burial of Paupers .....	198.00
Ambulance .....	375.63
	<hr/>
	\$35,905.80

# ANNUAL REPORT

## OF THE

# CITY HEALTH DEPARTMENT

MESSRS. THE COMMISSIONERS,  
and BOARD OF HEALTH.  
City of Edmonton.

Gentlemen:

The following report for the year ending December 31st, 1922, is respectfully submitted.

During the year there has fortunately been a gradual reduction in the prevalence of the more serious communicable diseases, which for two years had been unusually prevalent in our city, as well as in most cities of Canada, and the United States.

Owing to the employment of an increased staff of sanitary inspectors, it was possible to give greater attention to improvements in sanitary conditions throughout the inordinately large area in our city limits, and especially those areas not supplied with sewer and water facilities. Great improvement in general sanitation has been secured, necessarily limited to some extent by the time of unfortunate business and financial depression through which we are at present passing, associated as it is with lack of steady employment. In many cases it was found impossible to obtain the improvement in sanitation hoped for, because of the financial inability of the citizen concerned to raise the necessary funds, and until the city administration can adopt the policy of assuming the required expenditure to carry out the work in such cases, charging it up as a local improvement, it is hopeless to expect as great reforms in general sanitation, including sewer and water installation, as is desirable.

### ISOLATION HOSPITAL

Cases admitted to the Isolation Hospital totalled 428, compared with 906 for 1921, 742 in 1920, and 370 during 1919, indicating a return to normal conditions and a cessation of the extraordinarily high rate of incidence of infectious disease which prevailed during the years 1920 and 1921.

#### Patients Admitted by Months

January .....	59
February .....	42
March .....	70
April .....	37
May .....	27
June .....	17
July .....	20
August .....	32
September .....	29
October .....	27
November .....	32
December .....	36

Total 428

Only during the first three months of the year was the accommodation provided by our present Isolation Hospital taxed almost to its limits. Overcrowding of the wards which was unavoidable during the two previous years, did not occur, and as a natural consequence much better results and a minimum of cross-infection was secured.

The 428 patients admitted during the year were classified as follows according to the disease:

Smallpox .....	1
Diphtheria .....	112
Diphtheria suspect .....	22
Diphtheria and Erysipelas .....	1
Diphtheria and Measles .....	4
Scarlet Fever .....	172
Scarlet Fever suspect .....	4
Scarlet Fever and Diphtheria .....	24

Mastoid operation resulting from Scarlet Fever.....	1
Scarlet Fever and Measles .....	1
Chickenpox .....	2
Measles .....	11
Tuberculosis .....	15
Tuberculosis suspect .....	1
Influenza .....	23
Influenza suspect .....	1
Cerebro Spinal Meningitis .....	2
Suspect Spinal Meningitis .....	1
Polio-myelitis .....	1
After effects of sleeping sickness .....	1
Erysipelas .....	6
Pneumonia .....	2
Potts Disease .....	1
Gonorrheal Arthritis .....	1
Anaemia .....	1
Nursing babies with mothers .....	3
Demented and incurable disease .....	1
Scabies .....	2
Paralysis agitans .....	1
Rheumatoid arthritis .....	1
Chronic Rheumatism .....	1
Lumbago .....	1
Blind and incurable .....	1
Cancer of breast .....	1
Asthma .....	4
Senility .....	1

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Total 428

Included in the above list are a limited number of cases of diseases which are ordinarily not admitted to Isolation Hospitals. Owing to their being no Smallpox cases except one late in the year, the buildings used for this disease were disinfected and utilized to a limited degree at intervals, and a number of cases of various conditions, associated with old age, were admitted to one division of the Hospital which was not required for the ordinary infectious diseases. The admission of these latter was justifiable only because of there being up to the present time, no home for the aged and incurable in our city. It is obviously very undesirable that beds in our general hospitals should be occupied by this class of aged and incurable patients for indefinite periods. It is hoped that special accommodation in the near future for the aged and incurable class will be provided.

Deaths occurring in the hospital during the year totalled 31, from the following causes:

Diphtheria .....	11
Scarlet Fever .....	5
Scarlet Fever with Diphtheria .....	2
Cerebro Spinal Meningitis .....	1
Measles and complications .....	1
Tuberculosis .....	6
Pneumonia following Influenza .....	1
Pneumonia .....	1
Cancer of breast .....	1
General paresis of the aged .....	1
Rheumatoid Arthritis and old age .....	1

---

Total 31

	Per cent.
General death rate of all patients admitted .....	7.24
Death rate excluding Tuberculosis .....	6.
Diphtheria death rate .....	9.8
Scarlet Fever death rate .....	2.9
Scarlet Fever complicated with Diphtheria .....	8.3
Tuberculosis .....	40.
Measles .....	6.6
Influenza .....	4.3



The death rate from Tuberculosis is necessarily high, as the great majority of cases admitted are usually far advanced. The death rate for Diphtheria is somewhat high but could be reduced materially if all cases of the disease could be diagnosed early and treated with antitoxin. The high rate of mortality of Scarlet Fever when complicated with Diphtheria infection is to be noted. A bacteriological test of the throats of all Scarlet Fever cases on admission is being carried out as a safeguard, and it is found that it is not at all an uncommon thing for Scarlet Fever patients to have Diphtheria germs in their throats on admission. The lack of a sufficient number of single bedded wards in our present Isolation Hospital increases greatly the difficulty of dealing satisfactorily with such cases of double infection, and indicates the absolute necessity of providing a more modern and fully equipped Isolation Hospital. This, it is anticipated, will be built during the coming year, and will assist greatly in the control of the more serious infectious diseases.

During the year the nursing service at the Hospital, has been very satisfactory, and I take great pleasure in acknowledging the loyal co-operation and support of the Lady Superintendent, the Medical Superintendent and the Edmonton Hospital Board under whose supervision the operation of the Isolation Hospital is carried on.

**Communicable Diseases reported during the year and corresponding figures for 1921**

		Outside city cases			
	1922	1921	1922	1921	
Smallpox .....	0	155	1	18	
Diphtheria .....	176	579	22	18	
Scarlet Fever .....	316	703	21	11	
Scarlet Fever and Diphtheria	19	57	1	4	
Chickenpox .....	506	876	0	2	
Typhoid Fever .....	4	6	11	14	
Cerebro Spinal Meningitis...	5	0	0	0	
Infantile Paralysis .....	8	0	0	0	
Measles .....	2143	417	1	0	
German Measles .....	0	0	0	0	
Mumps .....	17	2381	0	0	
Whooping Cough .....	121	24	0	0	
Tuberculosis .....	16	14	10	8	
Erysipelas .....	8	13	3	0	
Totals	3339	5230	70	73	
Total cases 1921 .....			5,303		
Total cases 1922 .....			3,409		

In general there has been a great reduction in the prevalence of Communicable disease. Measles, however, was epidemic for the first three months, and almost two-thirds of the total of cases reported were Measles. Mumps, which was epidemic last year and furnished the majority of our large total was practically nonexistent this year, there being only 17 cases reported for the twelve months.

The prevalence of Scarlet Fever and Diphtheria while still fairly high, shows a reduction of over fifty per cent. as compared with the unusually high rate of incidence for the previous year.

Of Smallpox only one case occurred, which came in to the city from an outside point.

**Communicable Disease Reported by Months Including Outside City Cases**

	1922	1921	1920
January .....	854	721	396
February .....	723	919	410
March .....	711	1006	387
April .....	207	549	255
May .....	152	284	269
June .....	101	252	203
July .....	87	139	154
August .....	99	120	85
September .....	90	188	130

## CITY OF EDMONTON

October .....	84	295	240
November .....	166	394	473
December .....	135	436	461
Total	3,409	5,303	3,463

For 1922 the above figures show the same subsidence of Communicable disease as in previous years during the spring and summer months, but the same sudden rise in incidence of disease did not take place during the last three months of the year. This indicates that we have passed the peak and are now likely to have a more normal prevalence of infection in the coming year.

## TUBERCULOSIS

During the year there were 25 recorded city deaths from Tuberculosis of the lungs, and eight non-residents from outside the city. From other forms of Tuberculosis there were three city deaths and seven non-residents. It is quite evident that the majority of cases of Tuberculosis of the lungs are not reported, where 33 deaths occur, and only 23 cases have been reported to the Health Department. A considerable increase in the number of deaths from Tuberculosis over those registered during the last two years is noticeable.

	City cases	Outside	Total	Deaths
1920 .....	18	10	28	20
1921 .....	14	8	22	20
1922 .....	16	7	23	33

## SMALLPOX

Only one case of the disease occurred during the year and this case came in from outside the city. He had never been vaccinated during his lifetime and had the disease in a severe form. Fortunately he was on his arrival in the city promptly removed to the Smallpox hospital and no further cases occurred.

The remarkable freedom from this disease for any great length of time has a tendency to encourage among parents carelessness and indifference as to vaccination of their children, and it is to be regretted that when this disease does recur, perhaps in a very severe and dangerous type, it will have a tendency to flourish in direct proportion to the percentage of the unvaccinated in our city. Slightly over one hundred cases only applied at the Health Office for vaccination during the year, less than one-fifth of the number of our school children vaccinated during the previous year.

## TYPHOID FEVER

Eleven cases of Typhoid Fever occurred during the year, four from the city, and seven non-residents. Only one death occurred among the city cases and four from among the seven non-residents, indicating how severe the type of disease must have been among those brought in from the country to the city hospitals for treatment.

The death rate for the city is therefore very low or 1.6 per 100,000.

Year	Cases	Deaths	Rate per 100,000 population
1920 .....	18	2	3.
1921 .....	6	1	1.6
1922 .....	4	1	1.6

## SCARLET FEVER

This disease gradually subsided during the year, though still somewhat prevalent. There were 316 city cases reported as compared with 708 for 1921, and 623 for 1920. Among the 316 cases, 9 deaths occurred or 2.8 per cent. The favorable aspect of this disease was its marked subsidence during the last six months of the year, which indicates that it is likely to assume a much lower rate of incidence during the coming year.

Year	Cases	Deaths	Rate per 100,000	Rate per cent. of cases
1920 .....	623	10	15.4	1.6
1921 .....	708	11	17.	1.5
1922 .....	316	9	15.	2.8

## DIPHTHERIA

A marked decrease in the number of cases of Diphtheria particularly in the last six months occurred. There were 176 city cases, and 18 deaths, giving a rate of 10.2 per cent, a much higher rate than for the previous year. The death rate from this disease is in direct proportion to the failure to get medical assistance and treatment by antitoxin early in the disease. Among 15 additional cases brought in to the city for treatment, six died, a death rate of 40 per cent, indicating how seriously the failure to get antitoxin treatment early in the attack affects the prognosis.

A supply of antitoxin is kept at the office of the Health Department and is available at all times at a very low cost or entirely free to those who are unable to pay. There is therefore no reason why every case of Diphtheria in our city should not have early and prompt treatment if the necessity of having medical advice early in all cases of the disease affecting throat and tonsils is properly appreciated by our citizens.

Year	Cases	Deaths	Rate per 100,000	Rate per cent. of cases
1920 .....	337	17	26	5.
1921 .....	579	33	52	5.7
1922 .....	176	18	30	10.2

## MEASLES

Epidemic conditions existed at the beginning of the year and continued for three months. In all 2,143 city cases were reported to the Health Department. Among this number there were 8 deaths, from complications following Measles, or slightly over one-third of one per cent. It is not unlikely that Measles will now for some time be very slightly prevalent, as Measles and Mumps, from their very nature, occur in periodic epidemics separated by long intervals of comparative immunity as exemplified by there being only 17 cases of Mumps reported during 1922, as compared with 2381 for 1921.

## WHOOPIING COUGH

This disease usually of very serious import to young infants showed considerable increase during the year, there being 121 cases reported. Fortunately the death rate was, comparatively speaking, very low, there being only one death recorded as being due to Whooping Cough. There were 27 deaths in the year 1920, from 449 cases, and no deaths in 1921 from 24 cases reported.

## ERYSIPELAS

Only 10 cases of this disease were reported with one death.

## INFLUENZA

While this disease existed in a sporadic form during the year, it was not reported as it was not regarded by physicians as being of the epidemic type. That 39 city deaths and 9 non-resident deaths are due to Influenza as the primary cause indicates it was nevertheless so serious as to cause more deaths among adults than any other disease excepting Cancer and Heart disease.

Diseases causing highest number of deaths during the year are as follows:

	City cases	Non-residents	Total
Cancer (all forms) .....	34	22	56
Diarrhoea and enteritis .....	53	1	54
Premature birth .....	53	0	53
Heart disease .....	39	10	49
Influenza .....	39	9	48
Pneumonia .....	37	10	47
Broncho Pneumonia .....	25	3	28
Tuberculosis (all forms) .....	28	15	43
Tuberculosis of lungs (consumption) .....	25	8	33

## Vital Statistics

Year	Population	Deaths	Rate per 1,000
1919 .....	60,000 (estimated)	614	10.2
1920 .....	65,000 (estimated)	661	10.17
1921 .....	60,000 (census)	556	9.26
1922 .....	60,000 (census)	643	10.71

The above death rates are based on the deaths of citizens only and exclude

all deaths of non-residents which occurred. The general death rate for the current year 1922 is somewhat increased due largely to the exceptionally high birth rate and an increased mortality rate among the infants born.

#### Births—

Year	Population	Births	Rate per 1,000
1919 .....	60,000 (estimated)	1773	29.5
1920 .....	65,000 (estimated)	2339	36.
1921 .....	60,000 (census)	2161	36.
1922 .....	60,000 (census)	2226	37.1

The nationality of the male parents of the 2,226 children born gives some index of the proportions of the different races in our city, and indicates that the British born constitute nearly 70 per cent. of our population, those from the United States 12.4 per cent.

The countries of origin of the male parents were as follows:

British Isles .....	812
Canada .....	743
United States .....	278
Slavonic Countries .....	222
Teutonic .....	38
Scandinavian .....	31
France .....	16
Others .....	86

#### Marriages—

1919 .....	1,006
1920 .....	1,162
1921 .....	1,079
1922 .....	1,002

#### Infant Mortality—

Year	Deaths under 1 year	Total deaths all ages	Per cent. of total	Births	Rate per 1,000 births
1919 ....	189	823	23.	1773	106
1920 ....	227	661	34.2	2339	97
1921 ....	165	556	29.	2161	76
1922 ....	220	643	34.2	2226	98

By monthly returns the deaths of infants, the births and mortality rate per year for each month are as follows:

	Deaths	Births	Rates of Mortality per year per 1,000 of births
January .....	14	199	70.3
February .....	17	167	101.8
March .....	28	226	124.
April .....	23	177	130.
May .....	23	192	119.
June .....	11	178	61.8
July .....	16	179	87.
August .....	29	185	156.
September .....	16	202	79.2
October .....	14	202	69.
November .....	14	154	90.9
December .....	15	165	90.9
	220	2,226	98.
			(average rate)

The exceptionally high rate of mortality for the month of August was due to the prevalence of summer complaint following a hot dry season of summer weather. Investigation of the cause of this high mortality clearly indicated that the public milk supply could not be held responsible.

The source of milk supply to the 24 infants dying of summer complaint was as follows:

Milk supply from own or individual cows .....	7
Milk supply from three different dairies .....	5
Milk supply (special) to Children's Shelter .....	6
Fed on condensed milk or other proprietary foods .....	3
Congenital syphilis as primary cause .....	1
Brought in from outside city .....	1
Very delicate baby taken to hospital shortly before death .....	1

Of these 24 infants all except two were bottle fed, 12 were under 6 months of age, and 6 or 25% were illegitimate and were kept at the Children's Shelter.

The economic conditions under which all these infants had been born with three or four exceptions were found on investigation to be very unfavorable and even when brought under reasonably good care and conditions, the chance of a neglected or delicate infant surviving an attack of summer complaint is very small, as is evidenced by the heavy death rate at the Children's Shelter.

The causes of death of the 220 infants dying during the year are as follows in numerical order:

Prematurity .....	53
Diarrhoea and enteritis .....	45
Congenital debility and malformations .....	30
Other diseases peculiar to early infancy .....	20
Broncho Pneumonia .....	18
Influenza .....	17
Pneumonia .....	9
Accidents of birth .....	9
Measles .....	3
Diphtheria .....	2
Convulsions .....	2
Acute Bronchitis .....	2
Indefinite causes .....	3
Whooping Cough .....	1
Erysipelas .....	1
Simple Meningitis .....	1
Disease of Larynx .....	1
Disease of Ears .....	1
Acute Nephritis .....	1
Disease of nervous system .....	1

Total 220

Among the infants born there were 93 illegitimates, or almost four per cent (4%). Of these 93 cases, 30 deaths occurred, giving the appalling death rate of 322 per 1,000. Of the 220 infants who died, 59 appear to have been of foreign parentage, or 27 per cent. There were 86 still born children during the year not included in the births or deaths.

The ages at which these infants died after being born is of special significance, indicating that 25 per cent. died during the first day, 38 per cent. during the first week, 50 per cent during the first month, and 68 per cent. during the first 3 months of life.

#### Age at Death of 220 Infants Dying During the Year 1920

Under 1 day of life .....	55
Over 1 day and under 1 month .....	56
Over 1 month and under 2 months .....	22
Over 2 months and under 3 months .....	16
Over 3 months and under 4 months .....	10
Over 4 months and under 5 months .....	13
Over 5 months and under 6 months .....	12
Over 6 months and under 7 months .....	6
Over 7 months and under 8 months .....	9
Over 8 months and under 9 months .....	9
Over 9 months and under 10 months .....	7
Over 10 months and under 11 months .....	3
Over 11 months and under 12 months .....	2

The cause of the highest mortality in infants is prematurity. Of the 53 deaths from this cause, 42 were under 1 day, 9 under 1 month, one under 2 months and one under 3 months of age. Other causes of death, largely depend-

ent on the condition of the mother at the time of birth and proper care during pregnancy are Congenital debility and Malformations, from which 30 deaths occurred, diseases peculiar to early infancy, from which 20 deaths occurred, and accidents of birth, which were responsible for 9 deaths. Thus from the above special causes 112 deaths out of a total of 220 were due, and it is evident that to reduce our infant mortality it is necessary that a great deal more prenatal advice and care should be provided than up to the present it has been possible to give, to many expectant mothers who, in the great majority of cases are unfortunately living under poor conditions, and in many instances have little knowledge or education as to their own welfare, or the care of their children after birth. For this reason, it was recommended in the last Annual Report that an additional nurse to deal with Child Welfare and prenatal care of mothers should be added to the staff of the Health Department for 1923. The report of the visiting nurse attached herewith shows, that 1813 visits were made during the year. A perusal of her report indicates how valuable such work is, and how great the variety of disabilities among the poorer classes she is enabled to lend her assistance to, though, primarily, she is employed to deal with the matter of Child Welfare and prenatal care of expectant mothers. A supply of simple remedies and drugs is kept at the department for the relief of common ailments and minor injuries among the poorer classes. Where more serious or doubtful conditions exist, the case is referred to a physician. To establish proper co-operation between the Health Department and the work of the Provincial Clinic this Health Department nurse attends and assists at the Child Welfare Clinic held on two afternoons a week, and endeavors in every way to induce mothers who are not likely or unwilling to seek advice from a physician privately, to make use of this public clinic for the welfare of their babies and children of pre-school age. There is no doubt that any prejudice which may have existed in regard to this Clinic is gradually being overcome and that its usefulness is correspondingly increasing from year to year. That the benefits to the babies who attend the clinic abundantly justify its existence, is evident from the fact that among the 1013 babies who attended the Clinic during the year under two years of age only 26 deaths occurred. Of these 26 deaths, 22 were under one year of age, leaving 198 deaths among babies who had no connection with the Clinic. Approximately 75 per cent. of the 1013 babies attending the Clinic were under one year of age. Making due allowance for the fact that 83 deaths occurred either in the first day of life or during the first week, and that in addition, a large number of infants are cared for at the Children's Shelter and other institutions which necessarily are not taken to the Clinic, it is obvious that the death rate among infants which habitually are taken to the Clinic for advice, is less than half that among those not attending the Clinic. It should be clearly understood that the chief function of this Clinic is the prevention of disease and the imparting of advice and information to the mothers which enables them to keep their babies well and thriving, rather than to treat them after they are sick. A prenatal Clinic is also held one afternoon per week in the same room on the 6th floor of the Civic Block, to which any expectant mother may come for advice regarding herself and the prospective infant.

The important features to be emphasized in connection with this report on Infantile Mortality are:

1. The excessively high mortality in the first month of life; i.e., 25 per cent. of deaths in less than 24 hours, 38 per cent. in first week, and 50 per cent. in first month. It is obvious that little can be done to lower the mortality during the first month in life, except by efforts directed towards the improving the condition both physical and economic of the mothers.

2. The high rate of mortality from prematurity; 55 out of 220 dying from this cause, and in general the evidence that slightly over 50 per cent. of deaths among infants are directly due to conditions inherent in the mothers. In addition a serious reflection in this connection is the fact that there were 86 still born children.

3. The large number of illegitimate births, or 93, or almost 4 per cent. of the total births. Among these 93 unfortunates 30 deaths occurred, or almost one-third, giving a death rate per 1,000 of 322, or practically four times that of the legitimate children born. Leaving out the illegitimates the death rate would be 89 per 1,000 of births instead of 98. Practically all illegitimates are bottle fed babies, which greatly lessens their chance of survival.

4. Investigation indicates that in the great majority of cases, the economic and social condition of the parents is much below the average.

5. The value of the work being done by the Provincial Clinic in the prevention of illness among babies, and prenatal advice to mothers, and the necessity of extending and increasing its usefulness in every possible way, by inducing a larger number to avail themselves of its advantages. For this reason an additional nurse to assist the one already employed in the Health Department is strongly recommended. As the Provincial nurses confine their visits to the families of those attending the Clinics, the whole burden of house visitation on other needy cases falls on the one Health Department nurse, who, not being provided with transportation except the street cars, cannot possibly deal fully and adequately with the situation due to the extended area enclosed within the city limits. The appointment of an additional nurse to assist in this work, as recommended, should therefore be no longer delayed, if we are to attack successfully the strongest citadel of Infantile Mortality. The only alternative to this would be to supply the nurse already employed with a run-about car which would without doubt greatly increase her ability to deal adequately with the situation.

During the year Dr's Folinsbee and Leitch have voluntarily given their services to the Clinic on alternative days, and it is recommended that such splendid service should be suitably recognized by a yearly honorarium.

#### Summary of Statistics

Area of city (including 1,000 acres water) acres .....	27,520
Population (census) approximately .....	60,000
Persons per acre of land .....	2.26
Natural increase (excess of births over deaths) .....	1,583
Rate of natural increase per 1,000 population .....	26.4
Still births .....	86
Births (excluding still born) .....	2,226
Birth rate per 1,000 population .....	37.1
Deaths (excluding still born) .....	643
Death rate per 1,000 population .....	10.7
Deaths of infants under one year of age .....	220
Infantile mortality rate per 1,000 births .....	98
Marriages .....	1,002
Rate per 1,000 population .....	16.7

#### Scavenging and General Sanitation

At the end of 1921 there were approximately 5,138 outhouses in the city, which were divided as follows into two classes:

- (1). 3,156—absolutely necessary, no sewer and water being available.
- (2). 1,982—illegal, i.e., situated where sewer and water are available.

During the year 1922, installations of sewer and water made were 634, classified as follows:

- (1). In 300 new houses erected.
- (2). In 120 old houses.
- (3). In 214 business and semi-business premises.

There were 33 new houses erected where no sewer and water was available, consequently increasing the number of outhouses by 33. There would appear therefore to be a reduction of 120 for the illegal class of outhouses, and an increase of 33 in the class legally existing as necessities. At the end of 1922 therefore, there are 3,189 legally existing outhouses, and 1,862 still in existence in contravention of the sewer and water By-law. The small reduction in the number of the latter class is somewhat disappointing, but under present financial conditions to enforce the By-law drastically would be equivalent to confiscation of property in many cases, and until it is possible for the city to assist in the installation of water and sewer service as a local improvement, as is the case in some other cities, no very rapid improvement in sanitation in this respect can be expected. There is no possibility of any disease occurring in our city from the use of city water under its present treatment and management, and as a measure of safety it is infinitely to be preferred to wells and springs within the city limits, which are frequently found to be of doubtful purity. Edmonton's city death rate from Typhoid Fever is similar to last year, less than 2 per 100,000 of population, a very low death rate, which should be reassuring to those who occasionally doubt the purity and safety of our city water supply.

### Medical Relief

In co-operation with the Welfare Board of the city, many visits have been made to needy cases coming under its operations where medical inspection and aid were called for. The operation of the free Clinic at the University Hospital, has been found of the greatest assistance, many cases of illness among those unable to pay for medical services having been sent there for advice and treatment. If necessary, arrangements for their admission to hospitals are made through application by the Medical Officer of Health.

### Food and Milk Inspection

Full reports on the work of the Department in these branches will be found in the attached reports of the Food and Dairy Inspectors. In connection with the work done by the Food Inspectors it is significant that the huge bulk of nearly 23 tons of food supplies has been condemned as unfit for human consumption.

During the year the Tuberculin testing of cows by the Dominion Authorities was begun and carried on vigorously, adding considerably to the responsibilities and duties of the Milk and Dairy Inspectors. On the whole, while several herds of cows were found to be very seriously affected, resulting in their being almost exterminated, the percentage of reactors in the district as a whole was reasonably low. Cattle imported into the Province from other parts of the Dominion, appear to have been responsible for the most seriously affected herds, which had become contaminated by their introduction. In native cattle not exposed to infection the incidence of Tuberculosis was found to be only one half of one per cent.

In concluding this report, it gives me pleasure to testify to the admirable co-operation and assistance which have been extended to the Health Department by all other Departments and Boards, in any way associated with Health work and effort.

During the year the Board of Health has held twelve regular meetings and four special meetings.

During the month of November, the ambulance service for contagious and infectious diseases, was taken under the direct control and operation of the Health Department, a fully equipped ambulance being purchased. Up to the end of the year the operation of this ambulance has been very efficient and satisfactory.

All of which is respectfully submitted,

T. H. WHITELAW,  
Medical Officer of Health.

## Annual Report, 1922

Dr. T. H. Whitelaw,  
Medical Officer of Health,  
Edmonton, Alberta,

Dear Sir:—

I herewith submit the following report of the City Health Nurse for the year 1922.

During the year, 1813 visits have been made. Many families have been visited several times. Among the children of these families the following illnesses have been found:

Indigestion .....	25
Diarrhoea .....	33
Malnutrition .....	28
Impetigo .....	36
Eczema .....	18
Ringworm .....	4
Discharging Ears .....	26
Swollen Glands .....	10
Tonsillitis .....	15
Measles, not reported .....	12
Chickenpox .....	6
Rickets .....	5
Epistaxis .....	2



Toothache and bad teeth in pre-school children .....	4
Cataracts (child 4 years) .....	1
Cataracts (child 6 years) .....	1
Rheumatism in children .....	5
Rheumatism in adults .....	3
Varicose veins .....	1
Pleurisy .....	5
Bronchitis .....	9
Influenza .....	12
Sore Eyes .....	5
Epileptic .....	1
Abscesses .....	3
Swollen wrists and ankles .....	1
Partial Paralysis .....	1
Tongue-tie .....	1

In many of these cases no doctor had been called until after the nurse had visited. When necessary the case was referred to the family doctor or the Medical Officer of Health, or the parents advised to bring the babies and pre-school children to the Provincial Child Welfare Clinics for examination and advice.

The City Nurse has been in attendance at all the Clinics, and by co-operating with the Provincial Health Nurses in the city there has been no over-lapping.

During the year 232 babies under one year of age have died, 12 of these being out of town cases. One hundred and eleven (111) babies died within one month after birth and one hundred and fifty two (152) died under three months of age.

Of the total number of deaths, 53 were premature births, 43 died of pneumonia, congestion of lungs or influenza, and 32 died of intestinal indigestion. Practically all the babies who died of intestinal indigestion were bottle fed babies.

Eleven families in needy circumstances have been supplied by the City Health Department, with small amounts of simple remedies, such as camphorated oil, carron oil, gauze and bandages, milk of magnesia, kasagra, aspirin or castor oil. Twelve families in poor circumstances have been given parcels containing babies and children's clothing. This clothing was made by kind friends and the Ladies' Aid of the First Baptist Church.

In general, all families visited have shown appreciation of assistance given and the nurse has always been received most kindly.

Respectfully submitted,

OLIVE B. BAILEY,  
City Health Nurse.

## Annual Report, 1922

Dr. T. H. Whitelaw,  
Medical Officer of Health,  
City of Edmonton.

Dear Sir:—

I beg to submit the following report of the sanitary work of the Department for the year ending December 31st, 1922:

Number of complaints received from the public .....	367
Number of complaints received, unfounded or rectified prior to inspection .....	75
Number of complaints referred to other Departments .....	75
Number of complaints received from other Departments .....	9
Number of inspections made .....	2671
Number of re-inspections made .....	1547

### Verbal and Written Notices Issued for the Abatement of Nuisances

To install plumbing .....	144
To clean plumbing .....	98
To repair plumbing .....	97
To clean cess pools .....	4
To repair sewers .....	1
To remove old buildings .....	1
To placard and close insanitary houses .....	10
To repair house .....	1

To thaw out water pipes .....	1
To abate nuisance from sewer gas .....	1
To partition off water closet from bed room .....	2
To light and ventilate lavatories.....	6
To repair eave troughs .....	1
To seal up soil pipe .....	1
To fill traps on plumbing system with oil .....	1
To turn water on plumbing fixtures .....	1
To install metal laundry tubs .....	11
To clean laundries .....	10
To provide new privies and pits .....	213
To repair or reconstruct privies .....	1789
To make privies accessible to scavengers .....	42
To remove privies .....	54
To clean privies .....	4
To crib privy pits .....	1
To remove bottles and empty tins from privy pits .....	1
To cease throwing out slops .....	10
To cease burning garbage .....	9
To remove garbage .....	12
To cease depositing refuse on lanes .....	10
To cease depositing refuse and manure on vacant lots .....	5
To remove inflammable refuse .....	2
To cease burning manure .....	6
To remove manure and to provide manure bins .....	812
To cease dumping manure in lanes .....	1
To clean stables .....	17
To remove stables .....	1
To repair cow stable .....	1
To remove poultry .....	11
To remove poultry from dwelling .....	14
To detach poultry house from dwelling .....	14
To clean poultry houses .....	29
To remove poultry houses .....	2
To provide enclosure for poultry .....	1
To remove coyotes .....	2
To remove cats and dogs .....	3
To remove hogs .....	1
To remove cattle .....	7
To remove sheep .....	1
To apply for cow permits .....	27
To apply for dairy license .....	1
To apply for hog permits .....	43
To cease using common towel .....	10
To provide ash and garbage cans .....	250
To calsomine rooms .....	2
To clean premises .....	69
To abate smoke nuisance .....	4
To abate dust nuisance in factory .....	1
To clean cuspidor .....	1
To remove rubbish and ashes .....	53
To repair ash pits .....	4
To remove dead animals .....	2
To remove decaying vegetables .....	9
To remove broken glass from lane .....	1
To remove water from basement .....	1
To clean basement .....	6
To cease using basement for dwelling purposes .....	1
To cease using common drinking cup .....	1
To abate nuisance from dog kennels.....	2
To abate nuisance from bed bugs .....	12
To clean vacant lots .....	24
To remove horse as per By-law No. 9, Sec. 34 .....	1
To abate nuisance from stagnant water .....	1
To remove trade refuse .....	13
To clean lanes .....	15
To remove filth from lanes .....	2

To place garbage cans easy of access to scavengers .....	15
To clean yards .....	117
To cease overcrowding .....	4
No. of barber shops inspected for license .....	82
No. of billiard rooms and pool halls inspected for license ...	27
No. bath houses inspected for license .....	3
No. bowling alleys inspected for license .....	2
No. dance halls inspected for license .....	4
No. well permits issued .....	1
No. yard hydrant permits issued .....	88
No. Venereal disease notices posted .....	70
No. prosecutions, convictions obtained .....	14
No. cases withdrawn .....	2
No. samples well water collected .....	6
No. samples free from contamination .....	2
No. samples unfit for domestic use .....	4

#### Inspection of Barns in Connection with Tuberculin Testing of Private Cows

No. of inspections made .....	265
No. of re-inspections .....	459
No. of private barns inspected .....	61
No. of private barns condemned .....	23
No. of private barns to be improved .....	258
No. of private barns that meet requirements of By-law .....	132
No. of barns now to be provided .....	33
No. of barns to be disposed of .....	22
No. of animals to be removed .....	44
Amount collected for cow and hog permits .....	\$543.95

Respectfully submitted,

W. R. GRAHAM,

Chief Sanitary Inspector.

## Annual Report, 1922

### INSPECTION OF FOOD BRANCH

Dr. T. H. Whitelaw,  
Medical Officer of Health,  
Edmonton, Alberta.

Dear Sir:—

The following report on the work of Food Inspection for the year ending December 31st, 1922, is respectfully submitted:

The regular inspection of premises and food stuffs in restaurants, hotel kitchens, bakeries, meat markets, groceries, fruit and confectionery stores, city markets, and abattoirs under city inspection, has been carried on during the past year.

The following is a summary of the work done during the year by this branch of the Department:

No. inspections made .....	8624
No. restaurants recommended for license .....	126
No. restaurants not recommended for license .....	8
No. candy and ice cream parlors recommended for license...	493
No. candy and ice cream parlors not recommended license..	1
No. butcher shops recommended for license .....	111
No. bake shops recommended for license .....	34
No. bake shops not recommended for license .....	2
No. fish shops recommended for license .....	3
No. fruit and vegetable wagons recommended for license...	14
No. cabarets recommended for license .....	1

#### Meat Inspections

No. quarters of Beef inspected .....	12,907
No. carcasses of Hogs inspected .....	3,780
No. carcasses of Mutton inspected .....	2,934½
No. carcasses of Veal inspected .....	4,682

No. quarters of Veal inspected .....	8
No. sets of ribs of Beef inspected .....	2
No. chucks of Beef inspected .....	1
No. loins of Beef inspected .....	17
No. carcasses of Goats inspected .....	1

**List of Meat Inspected and Condemned**

No. carcasses of Beef condemned .....	22
No. quarters of Beef condemned .....	3
No. carcasses of Hogs condemned .....	17
No. carcasses of Mutton condemned .....	21
No. carcasses of Veal condemned .....	29
No. quarters of Veal condemned .....	6
No. portions of Beef condemned .....	217
No. portions of Hogs condemned .....	301
No. portions of Mutton condemned .....	166
No. portions of Veal condemned .....	23

**Meat Inspected and Rejected**

No. carcasses of Beef rejected .....	5
No. carcasses of Hogs rejected .....	21
No. carcasses of Mutton rejected .....	2
No. quarters of Veal rejected .....	3

**List of Food Stuffs Condemned**

	Pounds
Beef .....	18,044½
Pork .....	6,919
Mutton .....	1,241
Veal .....	3,176
Fish .....	85
Fowl .....	67½
Fruit .....	1,837
Vegetables .....	510
Canned goods .....	4,509
Pickles .....	5,000
Butter .....	368
Eggs .....	90
Flour .....	1,900
Sundries .....	1,046
Candy .....	1,000

Total 45,793

**Held for Analysis**

October—10 dozen glasses of "Cunningham & De Fourier's" meat and fish paste. (Destroyed).

November—6 dozen glasses of "Cunningham & De Fourier's" meat and fish paste. (Destroyed).

**Prosecutions**

January 21st—one baker fined \$20.00 and costs for failing to keep his bake shop in a clean condition.

May 4th—one baker fined \$20.00 and costs for having dirty bread van, and another baker fined \$25.00 and costs for short weight bread.

May 12th—a butcher was fined \$15.00 and costs for failing to protect meats from dust, dirt and flies by a suitable covering while being conveyed through the streets.

May 16th—another butcher was fined \$10.00 and costs for keeping his meat market in a dirty condition.

June 1st—a slaughter house proprietor was fined \$5.00 and costs for allowing the accumulation of viscera in an outhouse causing a nuisance.

June 8th—an ice cream parlor proprietor was fined \$5.00 and costs for offering for sale fermented preserved fruit.

October 5th—a restaurant proprietor was fined \$10.00 and costs for failing to keep his restaurant kitchen clean and free from vermin.

Bread seized for short weight amounted to 86 loaves.

Respectfully submitted,

L. H. SWAIL, V.S.,

Chief Food Inspector.

## Annual Report, 1922

### CITY MILK INSPECTOR

Dr. T. H. Whitelaw,  
Medical Officer of Health,  
Edmonton, Alberta.

Dear Sir:—

I beg to submit the following report on the work of milk inspection for the year ending December 31st, 1922.

During the year, one hundred and seventy-three (173) applications for dairy licenses were received and disposed of as follows:

Recommended for license .....	101
Reported against .....	45
Held over at end of year .....	27
Total	173

The total number of inspections made was four hundred and eighty (480). In many cases there were certain minor improvements to be made in order that the barns should be in line for the Tuberculin testing.

In addition to this, one of the Sanitary Inspectors gave his full time for some months to the inspection of private cow barns inside the city, preliminary to the Tuberculin testing by the Dominion Government. He made in all seven hundred and eighty-five (785) inspections.

There were five hundred and fifty-seven (557) samples of retail milk taken for examination for bacteria count. In five of these the plates were spoiled by spreaders and no counts could be obtained. The results are tabulated as follows by months:

	Samples															No.	No.	No.
	No.	No.	%	No.	%	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.			
				Under 100,000		Under 200,000		Under 300,000	Under 400,000	Under 500,000	Under 1,000,000	Over 1,000,000						Spreaders
January ...	34	22	65	7	21	1	0	0	4	0	0	0	0	0	0			
February ..	20	18	90	1	5	0	0	1	0	0	0	0	0	0	0			
March .....	31	22	71	4	13	1	0	1	2	1	2	1	0	0	0			
April .....	50	25	50	5	102	8	2	0	7	3	0	0	0	0	0			
May .....	52	27	52	9	17	7	2	2	1	4	0	0	0	0	0			
June .....	72	42	58	12	17	1	2	3	3	9	0	0	0	0	0			
July .....	61	29	48	11	18	3	0	0	6	12	0	0	0	0	0			
August ....	46	30	67	5	11	0	4	0	3	3	1	0	0	0	0			
September .	47	33	70	3	6	5	1	0	2	3	0	0	0	0	0			
October ...	51	34	68	3	6	4	3	0	3	3	1	0	0	0	0			
November .	46	33	75	2	5	3	3	0	1	2	2	0	0	0	0			
December .	47	34	74	3	7	3	2	1	2	1	1	0	0	0	0			
	557	349	63%	65	11%	36	19	8	34	41	5							

It will be noted that of all the samples counted 63 per cent. went under 100,000, and 75 per cent. under 200,000. Forty-one samples or 7 per cent of the whole ran over the million mark. As must necessarily be the case in work of this kind these figures are rather worse than the actual conditions, as any dealer giving a high count has samples taken very much more frequently until the trouble is cleared up. As is to be expected most of our high counts were obtained in June and July.

There were 542 samples tested for butter fat, including 14 special samples. The average butter fat found was 3.96%, or excluding the non-authentic samples 3.94%, which is practically the same. Seven samples were found to be below standard, but it was not considered in any case that they are deliberately tampered with. We have had a large number of smaller dealers in Edmonton with from four cows upward, and the variation from the average with such small herds is apt to be great. For instance one peddler had samples only a few weeks apart give 2.9% and 5.0%, while his average agrees almost exactly with the general average for the year. The lowest average test was found from March to May 3.79%, while the highest 4.17% was in November.

Sediment tests were run on all the street samples, and on the whole were very satisfactory. A few were found at times that called for improvement. The sediment test, while it does not lend itself readily to numerical classification,

and is not easily recorded, yet is very useful in that the actual dirt can be shown to the producer.

In connection with the sanitary control of the South Side swimming pool and other pools in town, test solutions were made up and methods worked out to regulate the amount of chlorine used to ensure proper sterilization without causing undue taste or odour. Thirty-one (31) samples of pool water were taken to the University for bacterial examination, and the results show the feasibility of obtaining perfectly sanitary water without over-dosing, by means of proper chemical control. Two samples of chloride of lime were analysed in this connection. This work will be followed up this coming season.

Chemical tests were run on seven samples of seepage water, trying to trace connection between the city sewage and the water entering a basement. Salt was added in quantities to a nearby waste, and also a quantity of very strong dye stuff, but no connection was proven.

Analysis was also made of a sludge settling from the city water. It was made up of Calcium and Magnesium Carbonates due merely to the hardness of the water.

Yours respectfully,

H. C. GRAHAM, B.A.,  
Milk Inspector.

## Annual Report, 1922

Dr. T. H. Whitelaw,  
Medical Officer of Health,  
Edmonton, Alberta.

Dear Sir:—

I beg to submit the following report on the inspection of dairies for the year ending December 31st, 1922.

Seven hundred and forty-four (744) applications for dairy licenses were received, five hundred and seventy-two (572) of which come under my report as follows:

	Totals	Granted	Refused	In Abeyance
Local and within 15 mile radius of city	367	296	51	20
Beaumont .....	5	2	3	
Bittern Lake .....	3	3		
Bruce .....	2	1	1	
Deville .....	1	1		
Dinant (near Camrose) .....	1	1		
Ferintosh (Red Deer Lake) .....	1	1		
Fort Saskatchewan .....	1		1	
Gwynne .....	1	1		
Holden .....	1	1		
Irma .....	1	1		
Leduc .....	27	15	12	
Millet .....	59	40	19	
Morinville .....	3	2	1	
Spruce Grove .....	3	2	1	
Stony Plain .....	4	3		1
Toffeld .....	46	24	21	1
Wetaskiwin .....	46	32	14	
Totals	572	426	124	22

Number of inspections made were 1298.

In the recent Tuberculin testing of all cows from which milk and table cream is supplied to Edmonton, the majority of cattle which reacted to the test were traced to animals which were found to have been shipped into this Province, and had in many cases spread the disease amongst cattle with which they came in contact. It is gratifying to note that where the native cattle of Alberta had not come in contact with imported animals the average reaction of native cattle was but one half of one per cent.

During the year, the Department of Agriculture took over the grading of cream, which has eliminated the evil of over grading, and overcome any tendency on the part of wholesalers to grade cream as "Inspected", from a producer who held no dairy license.

Respectfully submitted,

C. ELLINGER,  
Dairy Inspector.